Levels and Trends in Contraceptive Use

Iqbal Shah, Ph.D.
Department of Reproductive Health and Research
World Health Organization
1211 Geneva 27
Switzerland
Tel: +41-22-791.33.32
Fax: +41-22-791.41.71
email: shahi@who.int
Levels and Trends in Contraceptive Use

Outline

• Why study contraceptive use?
• Definition of key concepts and terms
• Levels and recent trends in contraceptive use
• Type of contraceptives employed
• Contraceptive choice and discontinuation
• Summary and conclusions
Reproductive rights and reproductive health

“Reproductive health therefore implies that people are able to have a satisfying and safe sex life and that they have the capability to reproduce and the freedom to decide if, when and how often to do so. Implicit in this last condition are the right of men and women to be informed and to have access to safe, effective, affordable and acceptable methods of family planning of their choice for regulation of fertility which are not against the law...........” ICPD, 7.2
Why study contraceptive use?

Declining fertility desires and levels

Throughout the world, fertility desires and levels are coming down. This requires contraceptive methods to prevent unintended pregnancy.

There is a close relationship between the level of fertility and contraceptive prevalence.
Mean number of children desired among ever-married women, Kenya

- 1977-78: 7.2
- 1989: 4.7
- 1993: 3.9
Total fertility rate and contraceptive use prevalence

Regression equation

\[ \text{TFR} = 6.845 - 0.066 \text{ (use)} \]

\[ R^2 = 0.83 \]

\[ N = 135 \]

Note: Lines above and below the regression line span a range of about one child on either side.

Outcome of Pregnancy

N = 210 million/year

- Spontaneous pregnancy loss: 14%
- Planned birth: 47%
- Mistimed birth: 9%
- Induced abortion: 22%
- Unwanted birth: 8%

39%
Levels of total fertility rate, by period and region

Source: UN, 2001
Levels of contraceptive prevalence

Source: Bongaarts, 1984; Shah, 1994; UN, 2001
Accounting for Fertility Decline (composite of 31 countries)

![Bar chart showing total fertility rate and reduction in fertility rate over time.](chart.png)

**Percentage of reduction by contributing factor**

- Higher age at marriage
- Reduced breastfeeding
- More use of contraception
- More induced abortion
- All other factors

(Source: Population change and development, World Bank, 1984)
Percentage Increase in Child Mortality for Previous Birth Intervals of Less than 24-48 Months (Referent)

<table>
<thead>
<tr>
<th>Country</th>
<th>Less than 18 months</th>
<th>18-24 months</th>
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<tr>
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<td>95</td>
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</table>
Additional Linkages

• Maternal mortality

• Dual protection against unintended pregnancy and sexually transmitted infections

• Increased opportunities for non-reproductive activities (for example, education and labour force participation)
Definition of key concepts and terms

**Contraceptive prevalence**

Percentage of all couples of childbearing age who are currently using a method of contraception.

(Number using a method/all couples with wife in age group of 15-49 years) * 100
Contraceptive prevalence (CP): some features

- Based on women’s responses than on couples
- Based on married women or those living in consensual unions
- “Use status” at time of the survey interview
- CP different from number of “acceptors”
- Main sources of data are Demographic and Health Surveys (for developing countries) & Fertility/Family Planning Surveys (for developed countries)
Contraceptive prevalence (CP): some variants

- Age group (15-49 versus 15-44)

- Denominator ("exposed" versus all married women)

- All women versus married women

- Type of methods (all methods versus modern methods)
Contraceptive Prevalence (CP) and Total Fertility Rate (TFR)

There is a strong empirical relationship between CP (%) and TFR (per woman)

- With 72% of prevalence, replacement level of TFR (2.1) can be achieved

- $TFR = 6.845 - 0.066(\%CP)$

or

- $\%CP = (6.845 - TFR)/0.066$
Trends in Use of Contraception

Table 1: Average current prevalence of specific contraceptive methods, by region and year (percentage of couples with wife of reproductive age using a method)

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</table>

* = Little or no reported use.
Contraceptive prevalence (CP): highlights

- CP in most developed countries is over 70% (Bulgaria=86%; UK, Switzerland=82%)

- Among developing countries, East Asia has the highest (82%) CP (over 70% in China, Rep. of Korea)

- Overall CP is the lowest (25%) for Sub-Saharan Africa (high in Botswana, Mauritius, Reunion, South Africa, and Zimbabwe) but low (less than 10%) in Burundi, Eritrea, Ethiopia, D.R. Congo, Chad, Liberia, Mali, Mozambique, Niger, and Sudan (North)
Contraceptive prevalence (CP): highlights

• CP over 50% in 23 Latin American and Caribbean countries (highest in Brazil, Cuba, Colombia, Costa Rica, El Salvador, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Trinidad & Tobago)
Contraceptive method mix

• “Refers to both the menu of contraceptive choices available through a programme and the actual pattern of method use in the population. To avoid confusion about these related but different concepts, the term ‘method mix’ is used to refer to the contraceptive options offered, and the term ‘method use pattern’ is used to refer to the methods used in the population”. [WHO, 1994, Contraceptive method mix: Guidelines for policy and service delivery]
Contraceptive method mix

• Method mix address better the varying needs of couples

• Controlling for socio-economic development, the addition of one modern method widely available could increase prevalence by 6%

• Quality of care involves provision of a broad range of methods; complete and accurate information about all methods offered, responding to users’ choice
Contraceptive method choice

• Method choice is affected by personal factors such as age, parity, reproductive intentions, frequency of intercourse, relationship with the partner, influence of others

• Affected by method characteristics (provider-dependent or under user-control, mode of action, convenience, frequency)

• Programme factors such as availability and accessibility, information and quality of services
Percent of all users by type of method, Developing countries, 2001

- Tubectomies: 37%
- Vasectomies: 6%
- Pills: 10%
- IUDs: 27%
- Condoms: 5%
- Vaginals: 1%
- Traditional: 1%
- Injectables: 9%

Source: UN, 2001
Percent of all users by type of method, Developed countries, 2001

- Tubectomy: 16%
- Vasectomy: 10%
- Pill: 25%
- IUD: 15%
- Condom: 11%
- Vaginal: 2%

Source: UN, 2001
Discontinuation of Contraception within 12 Months because of Method Failure or Health Concerns (including Side-effects)

Source: Shah, 2001
Summary & Conclusions

• 62% of all couples are using a contraceptive method as of the last update in 2001

• Among developing countries, contraceptive use is the highest in East Asia and lowest in Sub-Saharan Africa. However, increase in contraceptive use is witnessed almost everywhere.

• Tubectomy, IUD and the pill account for much of contraceptive use in the world.
Summary & Conclusions

• Use of rhythm and withdrawal is more common in developed countries and in some African countries

• Tubectomy is more common, especially in Latin America and in some Asian countries (e.g., India, Pakistan, Philippines, Rep. of Korea, Sri Lanka, and Thailand)
Summary & Conclusions

• IUD is a leading method in China, Egypt, Tunisia, and Viet Nam

• Oral pill is the main method in Bangladesh, Indonesia and Mauritius
Summary & Conclusions

• Regions and countries differ in terms of overall contraceptive prevalence as well as type of methods used

• Tubectomy is two and half time as common in developing than in developed countries

• Pill is two and half time as common in developed than in developing countries
Summary & Conclusions

• IUD is two and half time as common in developing than in developed countries

• Traditional methods are twice as common in developed than in developing countries
Summary & Conclusions

• Method choice depends on a number of personal considerations as well as methods characteristics and programme factors

• Discontinuation of spacing methods is high with 42% discontinuing by 12 months because of side-effects or method-failure

• IUD is likely to be discontinues less either due to method failure or because of health concerns
Increasing Contraceptive Prevalence

1. Better access to family planning services

2. Improved quality of care in service provision

3. Wider choice of acceptable and affordable methods

4. Availability of new and improved methods
References


